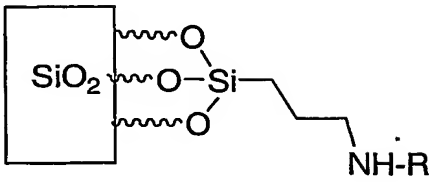
WHAT IS CLAIMED IS:

1. A stationary phase of Formula I:



wherein

R is:

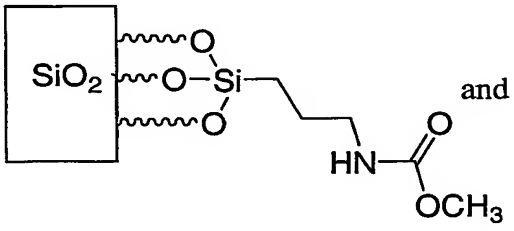
c) $-(CH_2)_nCONH_2$, or

d) $-COOR^1$;

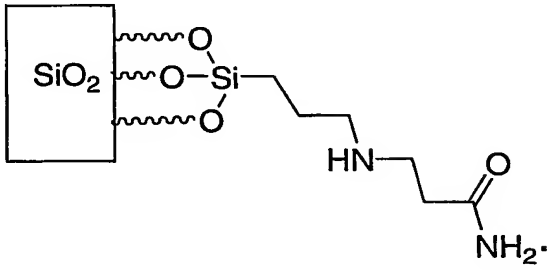
n is: 1 to 4; and

R^1 is: C_1-C_2 alkyl.

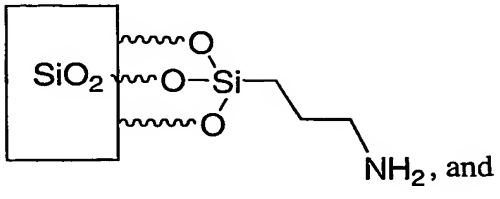
2. The stationary phase of Formula I, as recited in Claim 1, selected from the group consisting of:



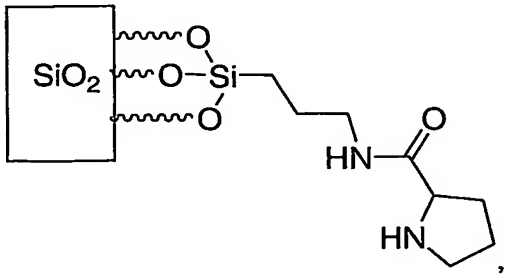
and



3. A method for the purification of a peptide or a lipopeptide by using a liquid chromatography system with a stationary phase selected from the group consisting of: the stationary phase of Formula I, as recited in Claim 1, Tosoh Amide 80,



, and



,

and a mobile phase, to improve the selectivity and/or productivity of the purification.

4. The method as recited in claim 3, wherein the mobile phase is a solvent system comprising one or more solvents.

5. The method as recited in claim 4, wherein the solvents in the solvent system are selected from the group consisting of: water, methanol, ethanol, isopropanol, hexane, heptane, ethyl acetate, isopropyl acetate, acetonitrile, methyl t-butyl ether (MTBE) and methylene chloride.

6. The method as recited in claim 4, wherein the liquid chromatography system is for the purification of a peptide.

7. The method as recited in claim 4, wherein the liquid chromatography system is for the purification of a lipopeptide.

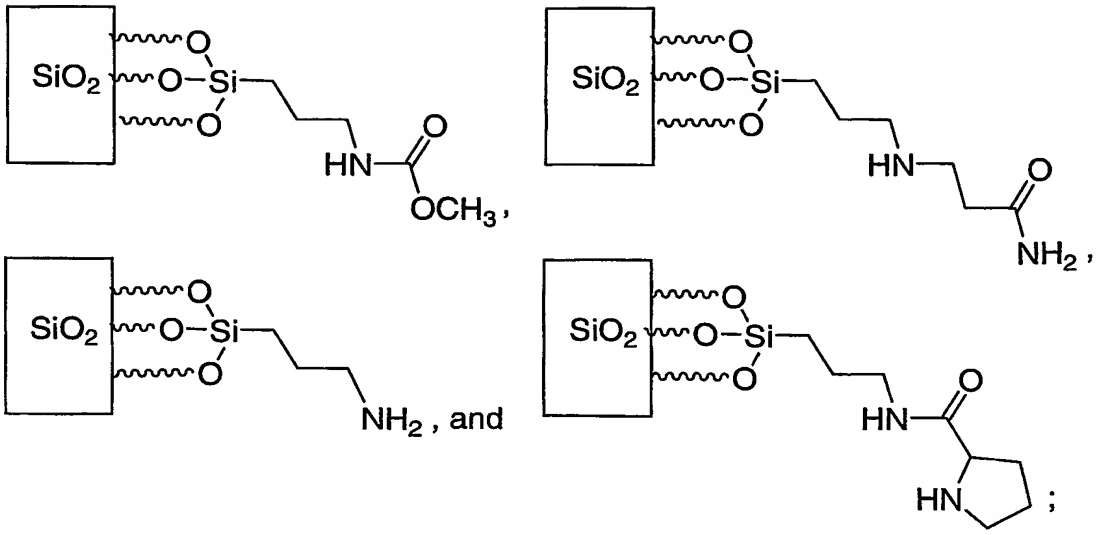
8. The method as recited in claim 7, wherein the lipopeptide is a fermentation product precursor of caspofungin, micafungin, cilofungin, andulifungin and daptomycin.

9. The method as recited in claim 8, wherein the lipopeptide is the precusor of caspofungin, pneumocandin B_0.

10. The method as recited in claim 9, wherein the mobile phase is a solvent system comprising water, methanol, and ethyl acetate.

11. The method as recited in claim 6, wherein the peptide is oxytocin or bradykinin.

12. A method of purifying Pneumocandin B_0 with a liquid chromatography system comprising a stationary phase selected from: Tosoh amide 80,



and a mobile phase to improve the selectivity and/or productivity of the purification.

13. The method as recited in claim 12, wherein the mobile phase comprises a solvent system, wherein the solvents in the solvent system are selected from the group consisting of: water, methanol, ethanol, isopropanol, hexane, heptane, ethyl acetate, isopropyl acetate, acetonitrile, methyl t-butyl ether (MTBE) and methylene chloride.

14. The method as recited in claim 13, wherein the solvent system is a mixture of ethyl acetate, methanol and water.